AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A bump and vias structure, comprising:

a metal layer;

a bump mounted on a landing pad portion of the metal layer;

a first plurality of vias connected to a first outer region of the metal layer, wherein the first outer region is connected to a first density of vias; and

a second plurality of vias connected to a second outer region of the metal layer, wherein the second outer region is connected to a second density of vias,

wherein the first density and second density are greater than a third density of vias connected to a central region between the first and second outer regions, and

wherein an area of the metal layer linearly extending ~~across~~from an edge of the metal layer to another edge of the metal layer is laterally disposed between the landing pad portion and both the first plurality of vias and the second plurality of vias, and

wherein there is an absence of vias between the area and the bump.

2. (Original) The bump and vias structure of claim 1, wherein the first density is substantially equal to the second density.

3. (Original) The bump and vias structure of claim 1, wherein a first current path from the first outer region to the bump is substantially equal to a second current path from the second outer region to the bump.

4. (Original) The bump and vias structure of claim 1, wherein there are no vias in the central region.

5. (Original) The bump and vias structure of claim 1, wherein current injection from the first outer region to the bump is greater than current injection from the central region to the bump.

6. (Original) The bump and vias structure of claim 1, wherein current injection from the second outer region to the bump is greater than current injection from the central region to the bump.

7. (Original) The bump and vias structure of claim 1, wherein the central region is positioned further from the bump than the first and second outer regions.

8. (Currently Amended) An integrated circuit, comprising:

a metal layer;

a bump mounted on a landing pad portion of the metal layer;

a first plurality of vias connected to a first outer region of the metal layer, wherein the first outer region is connected to a first density of vias; and

a second plurality of vias connected to a second outer region of the metal layer, wherein the second outer region is connected to a second density of vias,

wherein the first density and second density are greater than a third density of vias connected to a central region between the first and second outer regions,

and

wherein an area of the metal layer linearly extending ~~across~~from an edge of the metal layer to another edge of the metal layer is laterally disposed between the landing pad portion and both the first plurality of vias and the second plurality of vias, and

wherein there is an absence of vias between the area and the bump.

9. (Original) The integrated circuit of claim 8, wherein the first density is substantially equal to the second density.

10. (Original) The integrated circuit of claim 8, wherein a first current path from the first outer region to the bump is substantially equal to a second current path from the second outer region to the bump.

11. (Original) The integrated circuit of claim 8, wherein there are no vias in the central region.

12. (Original) The integrated circuit of claim 8, wherein current injection from the first outer region to the bump is greater than current injection from the central region to the bump.

13. (Original) The integrated circuit of claim 8, wherein current injection from the second outer region to the bump is greater than current injection from the central region to the bump.

14. (Original) The integrated circuit of claim 8, wherein the central region is positioned further from the bump than the first and second outer regions.

15. (Currently Amended) A method for reducing current crowding in a bump and vias structure, comprising:

distributing current from a first outer region of a metal layer to a bump mounted on a landing pad portion of the metal layer, wherein the first outer region is connected to a first density of vias; and

distributing current from a second outer region of the metal layer to the bump, wherein the second outer region is connected to a second density of vias,

wherein the first density and second density are greater than a third density of vias connected to a central region between the first and second outer regions, and

wherein an area of the metal layer linearly extending ~~across~~from an edge of the metal layer to another edge of the metal layer is laterally disposed between the landing pad portion and both the first density of vias and the second density of vias, and

wherein there is an absence of vias between the area and the bump.

16. (Original) The method of claim 15, wherein the first density is substantially equal to the second density.

17. (Original) The method of claim 15, wherein a first current path from the first outer region to the bump is substantially equal to a second current path from the second outer region

to the bump.

18. (Original) The method of claim 15, wherein there are no vias in the central region.

19. (Original) The method of claim 15, wherein current injection from the first outer region to the bump is greater than current injection from the central region to the bump.

20. (Original) The method of claim 15, wherein current injection from the second outer region to the bump is greater than current injection from the central region to the bump.

21. (Original) The method of claim 15, wherein the central region is positioned further from the bump than the first and second outer regions.

22. (Previously Presented) A method for reducing current crowding on a bump, comprising:

defining a first region and a second region on a metal layer having a landing pad portion to which the bump is mounted;

determining a first current path length from the first region to the bump;

determining a second current path length from the second region to the bump;

selectively disposing a first plurality of vias in the first region at a first density depending on the first current path length; and

selectively disposing a second plurality of vias in the second region at a second density depending on the second current path length.

23. (Original) The method of claim 22, wherein the first current path length is longer than the

second current path length, and wherein the first density is greater than the second density.

24. (Original) The method of claim 22, wherein the second plurality of vias is disposed further from the bump than the first plurality of vias.

25. (Original) The method of claim 22, further comprising:

defining a third region on the metal layer;

determining a third current path length from the third region to the bump; and

disposing a third plurality of vias in the third region at a third density depending on the third current path length.

26. (Original) The method of claim 25, wherein the third current path length is longer than the second current path length, and wherein the third density is greater than the second density.

27. (Original) The method of claim 25, wherein the second plurality of vias is disposed further from the bump than the third plurality of vias.

28. (Original) The method of claim 25, wherein the first density is substantially equal to the third density.